

**AMENDMENTS TO THE CLAIMS:**

1. (Currently Amended) A system for analyzing medical treatment data associated with medical treatments for a plurality of patients to determine a medical treatment guideline based on actual treatment of a plurality of patients, and for updating at least one medical device that is in communication with the system with the guideline, the system comprising:

a memory for storing medical treatment data associated with medical treatments actually delivered to a plurality of patients, the medical treatment data including a plurality of treatment parameters for each of the plurality of patients and a treatment parameter value associated with each treatment parameter; and

a processor operatively connected to the memory and configured to compile from the medical treatment data a plurality of treatment parameter values associated with a selected treatment parameter, analyze the compiled treatment parameter values, and determine a medical treatment guideline in accordance with the analysis, the medical treatment guideline representing acceptable values for the selected treatment parameter[[:]], ~~and a medical device in communication with the system, the system to~~ automatically supply supplying the medical device with at least one revised treatment guideline.

2. (Previously Presented) The system of claim 1 wherein the analysis of the compiled treatment parameter values includes providing a statistical distribution of the compiled treatment parameter values.

3. (Previously Presented) The system of claim 1 further comprising:  
a database for storing preestablished medical treatment guidelines; and  
wherein the processor is further configured to compare the compiled treatment parameter values to the acceptable values for the treatment parameter in the corresponding preestablished

medical treatment guideline for the selected parameter.

4. (Previously Presented) The system of claim 3 wherein the processor is further configured to adjust the acceptable values for the selected treatment parameter in the preestablished medical treatment guideline as a result of the comparison to create an updated medical treatment guideline for the selected treatment parameter.

5. (Original) The system of claim 3 wherein the processor is further configured to generate a report of the comparison.

6. (Original) The system of claim 1 wherein the processor is further configured to generate a report of the analysis.

7. (Canceled)

8. (Previously Presented) The system of claim 1 wherein the processor is further configured to integrate the determined medical treatment guideline into a database of preestablished medical treatment guidelines.

9. (Previously Presented) The system of claim 1 wherein the processor is further configured to determine a medical treatment guideline in accordance with the analysis, the medical treatment guideline representing an optimum value for the selected parameter.

10. (Previously Presented) The system of claim 1 wherein the medical treatment data includes patient physiological data, and the processor is further configured to analyze the treatment parameter values of the selected treatment parameter with respect to the corresponding physiological data for each of the plurality of patients and to determine a medical treatment guideline in accordance with the analysis, the medical treatment guideline representing at least one optimum value for the selected treatment parameter.

11. (Previously Presented) A system for analyzing medical treatment data to determine

medical treatment guidelines associated with medication delivered to a patient by a medication administration device, the system comprising:

a plurality of medication administration devices for delivering medication to a plurality of patients;

a memory associated with each medication administration device for storing medical treatment data associated with the medication actually delivered to each of the plurality of patients, the medical treatment data including patient identification data, medication identification data and medication administration device operating parameters;

a central processor configured to receive medical treatment data from each of the medication administration devices;

a database operatively connected to the central processor for storing preestablished medical treatment guidelines representing acceptable values for the medical administration device operating parameters;

means for communicating medical treatment data from the medication administration device to the central processor; and

means to update treatment guidelines in the medical devices;

wherein the processor is configured to compile from the medical treatment data a plurality of parameter values associated with a selected medication administration device operating parameter, analyze the compiled parameter values, and determine a medical treatment guideline in accordance with the analysis, the medical treatment guideline representing acceptable values for the selected parameter.

12. (Currently Amended) A method for analyzing medical treatment data associated with medical treatments for a plurality of patients to determine a medical treatment guideline, the

method comprising:

communicating medical treatment data associated with medical treatments actually delivered to a plurality of patients, the medical treatment data including a plurality of treatment parameters for each of the plurality of patients and a treatment parameter value associated with each treatment parameter; and

compiling from the medical treatment data a plurality of treatment parameter values associated with a selected treatment parameter;

analyzing the compiled treatment parameter values;

determining a revised medical treatment guideline in accordance with the analysis, the medical treatment guideline representing acceptable values for the selected treatment parameter; and

providing the revised medical treatment guideline to a medical device from a remote location.

13. (Previously Presented) The method of claim 12 wherein analyzing the treatment parameter values includes providing a statistical distribution of the treatment parameter values for the selected treatment parameter.

14. (Previously Presented) The method of claim 12 further comprising:  
storing preestablished medication treatment guidelines in a database; and  
comparing the compiled treatment parameter values to the acceptable values for the treatment parameter in the corresponding preestablished medical treatment guideline for the selected parameter.

15. (Previously Presented) The method of claim 14 further comprising:  
adjusting the acceptable values for the selected treatment parameter in the preestablished

medical treatment guideline as a result of the comparison to create an updated medical treatment guideline for the selected treatment parameter.

16. (Original) The method of claim 14 further comprising:

generating a report of the comparison.

17. (Original) The method of claim 12 further comprising:

generating a report of the analysis.

18. (Canceled)

19. (Previously Presented) The method of claim 12 further comprising:

integrating the determined medical treatment guideline into a database of preestablished medical treatment guidelines.

20. (Previously Presented) The method of claim 12 further comprising:

determining a medical treatment guideline in accordance with the analysis, the medical treatment guideline representing an optimum value for the selected parameter in accordance with the analysis.

21. (Previously Presented) A system as described in claim 11, wherein the means to update treatment guidelines in the medical devices comprises means to automatically update the treatment guidelines in the medical devices.

22. (Previously Presented) A system as described in claim 1, wherein the medical device is an infusion pump.

23. (Previously Presented) A system for analyzing medical treatment data associated with medical treatments for a plurality of patients to determine a medical treatment guideline based on actual treatment of a plurality of patients, the system comprising:

a memory for storing medical treatment data associated with medical treatments

delivered to a plurality of patients, the medical treatment data including a plurality of treatment parameters for each of the plurality of patients and a treatment parameter value associated with each treatment parameter;

a processor operatively connected to the memory and configured to compile from the medical treatment data a plurality of treatment parameter values associated with a selected treatment parameter, analyze the compiled treatment parameter values, and determine a medical treatment guideline in accordance with the analysis, the medical treatment guideline representing acceptable values for the selected treatment parameter; and

a medication device having an alarm and a library of appropriate parameters, the alarm being activated when a medical treatment guideline having parameters outside of the appropriate parameters is input into the medication device.